February-14-13 2:02:44 PM D2012-105 Accept Item ID: \*N900040100\* Setup Start **Revision ID:** Item Name: Arm \*4\* **Start Date:** 2/14/13 Start Qty: 4.00 **Cust Item ID:** Required Date: 2/22/13 Req'd Qty: 4.00 **Customer:** Reference: Run Start Process Plan: Mate: 13-0219 **Tooling:** Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Plan Reject Tool # Accept Reject Work Center ID Description Qty **Run Hours** Code Qty Number Stamp Draw Nbr **Revision Nbr** D2012-105 Ε 100 0.00 NC BRAKE \*100\* Brake NC 0.00 Memo Brake NC Punch to length as per Dwg D2012-105 & template D2012-105T1 110 0.00 Small Fab \*110\* Small Fab 0.00 Memo Small Fab 1-Deburr 120 QC5- Inspect part completeness to step on W/O DAS \*120\* 27 0.00 9-89 Memo Quality Control

											DQA:	Date	:
NCR: Y	es / No				WORK ORDER NON-CONFORMANCE / UPDATE						QA Closed:	Date	:
					DI	SPOSITION		ATA	AGAINS		PARTMENT		
Work Orde	r:						,					Water Jet	7
Part No.						Rework Scrap Use-as-is	ł B	Skid-tube Machining noforming	Crosstub Small Fa Finishir	₃b□	Pro Rec/Sto	Engineering Quality Other	
NCR N	0				Work	Order Update		Large Fab	Composi	te		Supplier	
Root				Descri	ption of wor	k order update	Initial	Ac	ction		Sign &		
Cause	Date	Step	Qty	(	or Non-confo	ormance	Chief Eng	Desc	ription		Date	Verification	QC Inspector
Doc/Data													•
Equip/Tooling		ļ L											
Operator			ļ										
Material [						* **							
Setup		1			• • •								
Other					,			*					
Process													
Supplier		1											
Training													
Jnapproved [										-			
						F	AULT CATE	GORY					
Landir	ıg Gear				Ge	eneral					-		_
,	Bending				Bend	,	Grain				Ovalized	Ĺ	Pressure/Forced
. [	Centre Not Concentric to O/S			BOM/Route	e	Hardwa	are			Over/Under	tolerance 🚅	Temperature/Cure	
Cracks				Broken/Da	maged	Inspect	ion Incomplete			Part Incorre	ct	Weld	
	Crushed/	Crimped.			Burrs		Instruc	tions Incomplete/	/Unclear		Part Lost/M	issing	Wrong Stock Pulled
Ī	Cuffs				Contaminati	on	Mainte	enance			Part Moved		
Ţ	Heat Trea	at			Countersin	k ·	Mislabe	eled			Positioned \	<b>N</b> rong	1
Ī	Inspection Strip in Tube Cut Too Short					Misrea	Misread				/Surge	Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Packaging

Packaging

February-14-13 2:02:44 PM Item ID: D2012-105 Accept \*N900040100\* Setup Start **Revision ID:** Item Name: Arm Start Qty: 4.00 Start Date: 2/14/13 **Cust Item ID:** Required Date: 2/22/13 **Req'd Qty:** 4.00 **Customer:** Reference: Run Process Plan: Date: Tooling: Approvals: Date: QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Reject Tool # Plan Accept **Work Center ID** Description Qty Qty Number Stamp Code **Run Hours** 130 Black Sandtex(Ref:4.3.5.7) per QS1005 4.3 0.00 \*130\* Powdercoat Powder Coating START TIME: OVEN TEMPERATURE FINISH TIME: OC3- Inspect Part Finish 0.00 \*140\* QC 0.00 Memo Quality Control Identify as per dwg & Stock Location. 150 \*150\*

0.00

Memo

NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE												
										QA Closed:	Dat	e:
Work Orde	ar:				DISPOSITION				AGAINST DE	PARTMENT,	PROCESS	
WOIK Olde	···				Rework	7 <b>!</b>		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	lo.				Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					Use-as-is	1		noforming	Finishing	4	e/Packaging	Other
NCR N	lo		·		Work Order Update			Large Fab	Composite	]	Supplier	
		т	i			$\perp$	1			T 6: 0		
Root		١			ption of work order update		itial		tion	Sign &	V - 25' - 4' - 1	061
Cause	Date	Step	Qty		or Non-conformance	Chi	ef Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling	_				·							
Operator					•							
Material												
Setup		1										
Other												
Process			,							1		
Supplier												
Training												
Unapproved												
					F	AULT	CATE	GORY				
Landir	ng Gear				General				_	<del></del>	-	
	Bending				Bend .		Grain			Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to	o/s	BOM/Route	ال	Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	ال	nspecti	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs		nstruct	ions Incomplete/I	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Moved	_	
Ī	Heat Trea	it			Countersink		Mislabe	led		Positioned V	Vrong	
Ī	Inspection	n Strip in	Tube		Cut Too Short		Misreac	i		Power Loss/	Surge	Other
Ī	Ripples in	Bend			Drill Holes	П	Offset		<u> </u>	-		
ľ	Torque M	laves in E	vtrucio	,	Drawing Out of Calibration							

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

February-14-13 2:02:44 PM Item ID: D2012-105 Accept \*N900040100\* Setup Start **Revision ID:** Item Name: Arm Start Qty: 4.00 **Start Date:** 2/14/13 **Cust Item ID:** Required Date: 2/22/13 Req'd Qty: 4.00 **Customer:** Reference: Run **Approvals:** Process Plan: Date: Tooling: Date: Stop \_\_\_\_\_Date: SPC (Y/N): Date: \_\_\_\_\_ Sequence ID/ Operation Tool ID Tool # Plan Reject Set Up/ Accept Reject Insp. Description **Work Center ID Run Hours** Code Qty Qty Number Stamp 160 QC21- Final Inspection - Work Order Release 0.00 \*160\* 0.00 Memo Quality Control

RB-09-24

							-	DQA:	Date:	,
NCR:	Yes	/ No			WORK ORDER NON-	CONFOR	MANCE / UPDATE	QA Closed:	Date:	
Work Orde	er:				DISPOSITION		AGA	AINST DEPARTMENT	/PROCESS	
Part No.					Rework Scrap	Thor	Machining Sma	<b></b>	Water Jet od. Eng. Coor.	Engineering Quality Other
NCR No.					Work Order Update	Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			re/Packaging Supplier	Other
Root					Description of work order update	Initial	Action	Sign &		
Cause		Date	Step	Qty	or Non-conformance	Chief En	Description	Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling					·					
Operator					·					
Material										
Setup										
Other										
Process										
Supplier										
Training										

**FAULT CATEGORY** 

## **Landing Gear** General Pressure/Forced Bend Grain Ovalized Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Weld Cracks Broken/Damaged Inspection Incomplete Part Incorrect Crushed/Crimped. Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Contamination Maintenance Part Moved Mislabeled Positioned Wrong Heat Treat Countersink Other Cut Too Short Misread Power Loss/Surge Inspection Strip in Tube Drill Holes Ripples in Bend Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

Unapproved

Status

February-14-13 10:50:04 AM

Work Order ID:

97104

Parent Item:

D2012-105

Purchased

Parent Item Name:

Arm

**Start Date: 2/14/13** 

Required Date: 2/22/13

Date Issued

Start Qty: 4.00

411.5409

Required Qty: 4.00

Qty

11.054316

Issued

Comments:	IPP Rev:I02.04.03A	dded Inspect le	vel 3NG							
Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Qty per Kit	Total
Item Name	Item ID	Purch	Item	Location	Location	Seq ID	Measure	Hand		Qty

No

M304TR0.500W.035

304 RD Tube .500 x .035W

_ocation	Loc Qty	Loc Code
MAT017	411.54094	
120633	70.1979	
121848	59.41244	
123303	201.9106	
123449	80.02	

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M125513 M125513

**)** 

NCR: Y	'es	/ No				WORK ORDER NON-C	10:	NFORM	MANCE / UPI	DATE			
											QA Closed:	Date:	
Work Orde	er:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS		
Part No					Scrap Machining Use-as-is Thermoforming			Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root					Descri	ption of work order update	ı	nitial	Act	ion	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data													
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Supplier	Ц			ļ.								:	
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Unapproved	Ш						<u> </u>	TCATE	CODY		<u> </u>		
						General	AUL	T CATE	GURY			<u> </u>	
Landi					,	General Bend	_	Grain			Ovalized		Pressure/Forced
		Bending	et Conco	ntric to 1	_/s	BOM/Route	$\vdash$	Hardwa	Iro	<b>-</b>	Over/Under	tolerance	Temperature/Cure
	$\vdash$	Centre Not Concentric to O/S Cracks			"  -	Broken/Damaged	<b> </b> -	-	ion Incomplete	<u> </u>	Part Incorre	<del></del>	Weld
	ш	Crushed/Crimped				Burrs		4	tions Incomplete/U	Unclear	Part Lost/Mi		Wrong Stock Pulled
		Cuffs				Contamination	Ė	Mainte	•		Part Moved		
	Н	Heat Trea	it			Countersink		Mislabe			Positioned V	Vrong	
		Inspection		Tube	<u> </u>	Cut Too Short		Misrea			Power Loss/		Other
	-	Ripples in				Drill Holes		Offset		I,			
	-	• •		Extrusio	n	Drawing		Out of	Calibration				
	Torque Waves in Extrusion Turning Sequence					Finish		Out of !	Sequence				

Outside Dimensions

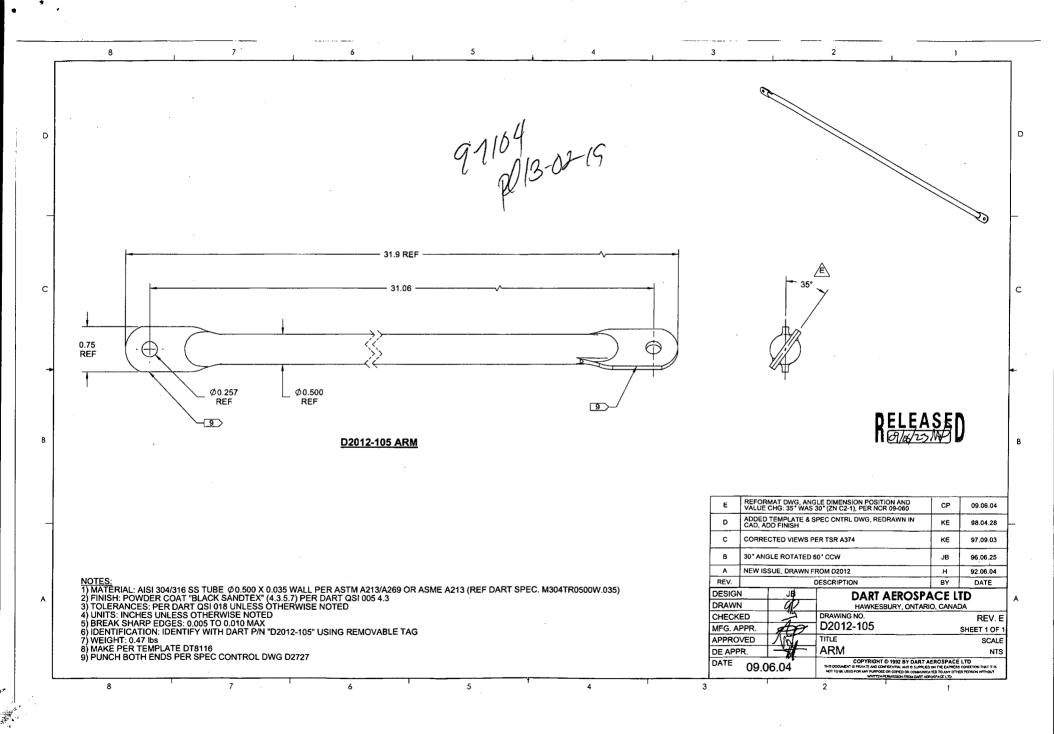
DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G



## **DART AEROSPACE LTD**



DANI ALI	osi Ac							AEROSPACE
Description: (	rm					Work Or	der: 97 <i>1</i>	04
Inspection Drawing	,		Rev		<del></del>	Part Num	hari Da	
Inspection Drawing	•		- Rev	E	<del></del>	Part Num	per: 1) 40	12-105
				TION				
Drawing Dimension				Reject	Meth	od of Inspectior	n Con	nments
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Measured by: 🥞	Ø	Checked By:	<b>5</b> .	QC insp	ector:		Engineering App	roval (if necessary):
			1		9-89			
Date 13/07/2	Λ	Date /3 /19	/	Date	13 a	QA)	Date	
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